Comment for retention of FCC Title II broadband classification (8-15-17)

In the last 30 years, Internet connectivity has become the premier method of doing business and communicating in the US and the industrialized world.

Originating as a US military application standard to link the military & US government to US university centers involved in military research, the internet has evolved across the world beyond scientific & research collaboration to become indispensable for personal, business, institutional and governmental telephone & email communication, logistical & data storage systems, and computational services.

While the US long benefited economically by possessing the world's best communication network for most of the 20th century, the US has since fallen to 15th in the world behind Asian & European nations after the US government gave up its management of the internet and in 1986 classified it as a deregulated "information system."

Since then, while the US internet carriers have individually greatly benefited financially from the classification, the US populace, small and medium businesses and the nation as a whole have not in comparison to much of the rest of the 1st world.

My argument is:

For the benefit of US business competitiveness in the world, the FCC should retain the Title II classification it wisely gave to wired and wireless internet service in February of 2015 rather than ret urn to the classification of non-regulated "information service" of 1986 that served the internet carriers well but the nation poorly during that interim.

It should do this because the advantages of Title II and Utility designation are as important to business and citizens now as much or more than they were in the 20th century.

Like the US electricity, natural gas, water / sewage, and transportation services before it, <u>during the twentieth century the US possessed the best communication / telephone network in the world expressly because our electronic communication system of the time ... the telephone service ... was designated by the US government as a Utility service.</u>

The resulting coordinated organizational management of disparate regional telephone companies that resulted from the US's 20th century telephone utility service designation, gave the US's telephone service critical competitive advantages of size (lower equipment cost, lower cost per user), widespread usage and efficiencies of uniformly shared and standardized technologies; which in turn was a boon for our manufacturing sector.

These advantages greatly surpassed the business, technical and manufacturing capabilities of the smaller less organized systems existing in the rest of the world. This pre-eminence in leveraged size allowed our companies to lead the world in 20th century telephone communication technology and directly benefit financially.

While providing uniform service access and equitable price / profit oversight are well known outcomes of Utility based services, a lesser known but equally important advantage of Utility classification is that utility governance provides a means of oversight and management whereby shared technical, engineering, record keeping and construction standards and legislative statutes are adopted uniformly across the nation by states, cities and service providers.

Such Utility organization & regulation can bestow to providers, users and the nation competitive size and technical efficiency advantages that provides a level playing field to all US based business.

While these aspects are intrinsic to a coordinated governmental organization, they are not available to a collection of "balkanized" independent, competing-for-profit corporate internet carrier entities as has existed in the US since 1986; each operating with proprietary technologies and committed to self-interest and stock holder profit rather than the nation's and telco's industry competitiveness and good as a whole.

No nation would send its armies abroad to battle with each troop independently led and equipped with dissimilar weapons, munitions and goals.

Why should we expect our nation's internet carrier & provider businesses to compete successfully with businesses abroad who are nationally supported and organized, while we in the US are equipped and managed in such disparate & balkanized "information service only" style and means as our internet providers are now?

The fact that China began its rise to economic and technical pre-eminence in the early 1980's exactly when we began deregulating and balkanizing our economy (communications industry in 1986) in order to boost corporate short term profit-seeking, is not an irrelevant coincidence.

If we want to regain market share and power in the communication business and manufacturing sector now led by Asia's current technical prowess, centralized management capabilities, and large unified market power, hamstringing our efforts by now allowing the US's internet service base to return to the decentralized, deregulated "internet service" classification that contributed directly to the US losing its international prememinence and market share in this sector in the first place, would be a huge mistake in my opinion.

A current specific problem:

In Seattle, like the rest of the nation, as there are no uniform "last mile" internet wiring / distribution standards & requirements in public and private buildings because no company is willing to lose competitive advantage by adopting another company's technology and there are no uniform record keeping methods required or possible.

Result:

1. Currently, building owners can contract to one carrier for exclusive & proprietary building wide service and wiring which results in:

- a. A lack of competitive market pressure in the building which in turn deters the carrier from offering competitive pricing and investing in technology to remain current and competitive.
- b. Similarly prevents renters access to competitive pricing and service capabilities
- 2. Currently, proprietary distribution technology is widespread amongst the carriers as there is no motivation or party available to establish & mandate universal "last mile" / building installation standards. This makes rapid widespread user saturation slower than necessary and / or more expensive and wastefully duplicative.
- 3. Creates no standards or requirements for uniform recordkeeping of internet distribution systems in existing and new buildings which denies consumers, businesses and government alike efficient oversight awareness of what systems and capacities exist and planning for what is possible and needed.

Seattle example # 1:

On Seattle's 6th avenue immediately adjacent to Amazon's new world headquarters is a 166,000 sq. ft. office building with 12 stories of general office rental space that was built in 1968 & remodeled in 2001.

Unless the businesses leasing in the building are large enough to afford to install their own fiber service "home run" from the street (or install their own microwave broadband service from the roof), since 1968 the small and medium business occupants have only ever had a choice of one building wide telephone & internet service provider ... the local phone company ... (who has the exclusive contract with the landlord since that time to provide building wide-wired "twisted copper pair" telephone & internet service for all tenants).

Lacking any competitive pressure in the building, the local phone company ... although long possessing the technologies for mid and high range bandwidth and the capital to install such... it had long not upgraded their City or building network to the customer to mid-range internet or fiber distribution means. With a "captive" market, it reaped windfall profits from a long depreciated twisted pair technology while other places in the nation and world move on to mid-range and fiber connectivities.

So for most of the last 15 years, the majority of the tenants of this building (who as small and medium size businesses have simple general office mid-range connectivity needs of 40 to 100 Mbps bandwidth) have been paying for slow and expensive to expand copper wired service at 3 times the going "internet based" telephone / internet connectivity rate (\$900 / mo instead of \$300 / mo) offered elsewhere on 6^{th} ave by carriers such as Comcast.

Seattle example # 2:

I live and operate a small consultancy from a 11 unit building in mid Seattle. Until recently the building was long served by the phone company with twisted copper pair phone

service and minimal speed DSL internet service while higher speed internet was provided by the local cable TV service.

18 months ago after the phone company installed a City wide fiber optic network (one leg of which ran down my building's back alley,) I contacted the phone company about availability in my building of the new high speed fiber network and was told by both their Sales and Tech Support offices that the phone company's records showed that it was now available in my building.

After I scheduled the installation and cancelled my cable internet connection for the same date, I painfully found out this was not true when the phone installer arrived to do my service install and found no "fiber drops" at the premises as "their records" had indicated. 3 weeks later, during which I had no internet service, the phone company completed the system engineering changes necessary and installed the fiber drops to the building and service to me.

To really illustrate the problem, last week when a 2nd building resident contracted for fiber service from the same local telephone company, there was a weeks long installation delay while they ... having originally done the fiber installation of fiber service to my building themselves ... ignorantly contracted with a sub contractor to install yet another (and duplicative) fiber drop although fiber drops for all units now already existed on the building in common wall distribution boxes since the time of my installation. And the sub contractor, not wanting to for go a fee, dutifully installed the unnecessary fiber drop.

When I asked both a phone company engineer and a regional account manager how this could happen, they both told me they are no standards or regulations for internet wiring in buildings nor for record keeping of such.

Seattle example # 3:

It is general knowledge in Seattle's IT technical community that much the same lack of infrastructure documentation & regulation (and resulting system's ignorance and installation waste) exists in the central distribution area of Seattle's main internet hub ... the Westin Building Exchange.

Summary:

The US's classification of Broadband internet from 1986 until 2015 as an "information service" in order to boost corporate expansion and profits, has left the companies and the US lagging and uncompetitive & in the world marketplace of telecommunications.

This is because Internet carriers left to their own devices and stockholder's interests, have naturally acted independently; maximizing profits while minimizing expense. This has occurred at the expense of our nation's technical cohesiveness and financial competitiveness. In the long term this will probably also be at the expense of the internet carrier's international competitiveness and profits.

If this trend continues, it shouldn't come as a surprise if large highly capitalized international internet service companies buy up our myopic "short term profit based" US internet carriers & providers.

In my opinion as an IT professional, the FCC's 2015 Title II classification of wired and wireless internet was a timely & necessary course correction needed to begin to make our citizens, companies, services and country viable and competitive in the world market for goods and services in which our nation competes for economic security.

As FCC Commissioner Wheeler stated at the time it's "too important to let broadband providers be the ones making the rules."

Please do not step our nation backwards towards international non-competitiveness by rolling back the FCC's 2015 Title II classification and returning our businesses,' and populaces' internet services and providers to a hamstrung, balkanized, unorganized and non-competitive "information service" FCC classification from 1986 that only enables corporations to wring short terms profits from a 0 sum market that does not extend much past beyond our national boundaries.

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